

ADAPTIVE DATA DIFFERENTIATION AND SELECTION FROM  
MULTI-COIL RECEIVER TO REDUCE ARTIFACTS IN RECONSTRUCTION

ABSTRACT

An automatic and adaptive MR data selection technique for use with a multi-receiver coil assembly in an MR imaging device is disclosed. The invention includes acquiring image data from a plurality of receiver coils and determining an index gauge for each of the images. The index gauge is a representation of the position of a given receiver coil within a desired field-of-view (FOV). The index gauges are compared and any image data set having an index gauge demonstrating a less than optimal position of the given receiver coil with respect to the desired FOV is removed based on the index gauges and the comparison. A final image can be reconstructed using the remaining image data sets. The final image is reconstructed from data having overall reduced noise, and therefore reduced artifacts.